

STATEMENT OF THE CLAIMS

1-6. (Canceled)

7. (Original) An apparatus for treating the wall of a blood vessel using electromagnetic energy, said apparatus comprising:

- a) an EM device adapted to be moved through the blood vessel;
- b) detection means for detecting movement of the EM device through the blood vessel;
- c) a power supply adapted to deliver a pulse of power for a selected duration;
- d) switch means coupled to said power supply and said EM device such that activation of said switch means causes said power supply to deliver said pulse of power to said EM device, said switch means also coupled to said detection means such that said switch means is activated by said detection means.

8. (Original) The apparatus according to claim 7, wherein:  
said detection means is mechanically coupled to said EM device.

9. (Original) The apparatus according to claim 8, wherein:  
said detection means includes at least one roller.

10. (Original) The apparatus according to claim 8 wherein:  
said detection means includes a lever.

11. (Original) The apparatus according to claim 7, wherein:  
said detection means is optically coupled to said EM device.

12. (Original) The apparatus according to claim 11, wherein:  
said detection means includes a light source and a light detector.
13. (Original) The apparatus according to claim 7, wherein:  
said switch means is mechanically coupled to said detection means.
14. (Original) The apparatus according to claim 13, wherein:  
said switch means includes an electrical wiper contact.
15. (Original) The apparatus according to claim 13, wherein:  
said switch means includes a lever.
16. (Original) The apparatus according to claim 7, wherein:  
said switch means is optically coupled to said detection means.
17. (Original) The apparatus according to claim 7, wherein:  
said switch means includes a light source and a light detector with a shutter  
therebetween.
18. (Original) The apparatus according to claim 7, wherein:  
said switch means is magnetically coupled to said detection means.
19. (Original) The apparatus according to claim 7, further comprising  
e) an actuator coupled to said EM device, said actuator being adapted to move said  
EM device through said blood vessel.

20. (Original) The apparatus according to claim 19, wherein:  
said actuator includes a manually operated trigger.

21. (Original) The apparatus according to claim 7, wherein:  
said detection means includes a light source directed at said EM device and a light  
detector arranged to detect light reflected from said EM device by said light  
source.

22. (Original) The apparatus according to claim 7, wherein:  
said detection means includes a light source coupled to said EM device and arranged  
to direct light toward an interior wall of the blood vessel and a light detector  
arranged to detect light reflected from the interior wall of the blood vessel by said  
light source.